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09/961,365	09/25/2001	Kazumasa Ayukawa	P21475	5941

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RESTON, VA 20191

EXAMINER
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CHARLES, MARCUS

ART UNIT	PAPER NUMBER
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3682

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/961,365  
Filing Date: September 25, 2001  
Appellant(s): AYUKAWA ET AL.

**MAILED**

**NOV 15 2006**

**GROUP 3600**

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Bruce H. Bernstein  
For Appellant

**EXAMINER'S ANSWER**

This is a supplemental action in response to the appeal brief filed November 08, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,813,915	Kotzab	03-1989
JP (05-83516)	Yasuhito et al.	12-1993

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4 and 6 are rejected under 35 U.S.C. 103 (a). This rejection is set forth in a prior Office Action, mailed on May 11, 2004.

**(10) Response to Argument**

Applicant indicated that claims 1-4 and 6 define over the prior art because the prior art do not teach or suggest the torsion coil spring is attached eccentrically to the axial center of the base, in which one end of the coil spring is connected to the base and the other end of the torsion coil spring is connected to the rocking arm, so that a first damping force acting on the rocking arm when the belt is tensioned is relatively larger than a second damping force acting on the rocking arm when the belt is slack. Applicant further stated that the amount of the damping force is amplified by the eccentricity the coil spring. In response, it should be noted that JP (05-83516) to Yasuhito et al. and Kotzab clearly disclosed the spring is eccentric to the axial center of the base. Note the axial center of the base of Kotzab is not necessarily the rotational center and thus the axial center is an imaginary line passing through the symmetrical center of the base. In reference to Kotzab, the axial center of the base is offset from the rotational center of the base and it can be seen that the spring is concentric to the rotational center but eccentric to the axial center. In addition, since the axial center of the base does not coincide with the rotational center the maximum spring force will be directed to the arm. It should also be noted the damping force is a function of the frequency and the frequency is a function of the load. Thus, when the load increases

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the twisting angle and the frequency increases and thus the damping force increases. Therefore, when the belt is tight the load on the arm increases resulting a larger damping force on the arm. It is known that when the belt is slack the load on the arm decreases thus the frequency decreases resulting a lower damping force.

In addition, it should be noted when the belt is under tension the angle of rotation of the arm increases the reaction to the torsion spring and thus the damping force also becomes larger (see an example in U S Patent 6,332,374 to Someda et al, (col. 5, lines 25-30)).

Regarding argument to claim 2, that the prior art do not teach the arm is movably attached to the base. It should be noted that both Yasuhito et al. and Kotzab clearly disclose the arm movably attached via a fastener to the base. For the above reasons, it is believed that the rejection to claims 1-4 and 6 should be sustained.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted



Marcus Charles

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October 03, 2006

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